SUPPORT FOR THE AMENDMENTS

Claims 2, 3, 9, and 10 were previously canceled.

Claims 4 and 11-13 are canceled herein.

Claims 1, 5, and 14 have been amended.

The amendment of Claims 1, 5, and 14 is supported by original Claims 1 and 5-7, as well as the corresponding previously pending claims.

No new matter has been added by the present amendments.

REMARKS

Claims 1, 5-8, and 14-16 are pending in the present application.

The rejection of Claims 1, 4-8, and 12-16 under 35 U.S.C. §112, first paragraph (written description and enablement), are believed to be obviated by amendment.

Applicants make no statement with respect to the propriety of this ground of rejection and in no way acquiesce to the same, including the Examiner's attempted expansion of the meaning of "represent" based on a non-scientific definition. Solely to expedite examination of this application, Applicants have limited the isolated nucleic acid sequence to those encoding the polypeptide of SEQ ID NO: 4. To this end, Applicants direct the Examiner to MPEP §2163, which states:

> [I]f an applicant disclosed an amino acid sequence, it would be unnecessary to provide an explicit disclosure of nucleic acid sequences that encoded the amino acid sequence. Since the genetic code is widely known, a disclosure of an amino acid sequence would provide sufficient information such that one would accept that an applicant was in possession of the full genus of nucleic acids encoding a given amino acid sequence, but not necessarily any particular species. Cf. *In re Bell*, 991 F.2d 781, 785, 26 USPQ2d 1529, 1532 (Fed. Cir. 1993) and *In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994).

This is precisely the case in the present application. As such, Applicants submit that the written description rejection is not tenable.

Withdrawal of this ground of rejection is requested.

The rejections of: (a) Claims 5-8, 11, and 13-16 under 35 U.S.C. §102(b), and (b) Claims 1, 4-8, and 11-16 under 35 U.S.C. §103(a), each over Foisset et al taken with the evidence of Barret et al are respectfully traversed.

Applicants continue to disagree with the Examiner for the reasons clearly articulated in the Appeal Brief filed on March 7, 2008, which are incorporated herein by reference and restated, in part, below. To facilitate expedient examination of this application, Applicants have limited the isolated nucleic acid sequence in Claim 1 to those encoding the polypeptide of SEQ ID NO: 4.

The Examiner alleges that Foisset et al anticipate the present invention because this publication is cited in the specification as reporting the existence of a plant having the *bzh* gene that is responsible for the mutant phenotype. However, the Examiner's explanation of how Foisset et al allegedly provide an enabling disclosure of this mutant plant, *i.e.* a disclosure that combined with knowledge in the prior art, would allow one of ordinary skill in the art to grow and cultivate the plant (MPEP 2121.03) is lacking.

The Examiner's basic argument is summarized on pages 8-9 of the Office Action where the Examiner states: The Office contends the claims are enabled because Applicants state

> "The inventors have now characterized and sequenced the *BZH* gene of *B. napus*, and its mutat allele *bzh*, associated with the dwarf phenotype previously observed by Foisset et al (1995, ...) (page 3, lines 30-33). Therefore the Office contends if a skilled artisan wants a plant with the mutant bzh gene, they can contact Foisset et al and request seeds comprising the mutant gene. It is known in the art that plant material disclosed in a published paper is available to the public upon request. One of skill in the art would not have to recreate th mutatnt bzh gene. The Office contends a plant comprising the mutant sequence of Applicants' was available to the public more than one year prior to Applicants' priority date."

First, the Examiner is reminded that Foisset et al actually disclose that the mutation results from with EMS. Following this teaching, one of skill in the art is able to perform chemical mutagenesis of seeds, to grow all the plants from the mutagenized seeds and to select the plants that have a reduced development. He is likely to obtain many plants having a reduced development, since, as already explained in the response to the previous Office Actions, many genes have been identified as involved in dwarfism (and probably, many genes not yet identified are also involved). The Examiner is reminded that EMS mutagenesis is non-discriminatory. EMS mutagenesis primarily induces G→A substitutions. Therefore, the only suggestion that the skilled artisan would take from Foisset et al is that the *bzh* mutation is likely a G→A substitution. However, the size of the rapeseed genome is about 1200×10^6 bp. If one considers a G/C content of approximately 50%, there would be about 600×10^6 possible G→A substitutions genome-wide. Clearly, the disclosure of Foisset et al would not place the skilled artisan in of the specific *bzh* mutant plant of the present invention; much less provide information on the gene involved in the *bzh* mutation or the position of the mutation within this gene.

Barret et al further disclose that the *bzh* mutation is semi-dominant. In order to determine if one or more of the EMS mutants selected on the basis of their reduced development has a semi-dominant mutation, the skilled artisan would have to study the progeny of each of these mutants by performing appropriate crosses to obtain homozygous and heterozygous plants for each of the mutation in order to compare them. If the mutation is semi-dominant the homozygous plants should be dwarf, while the heterozygous plants should be semi-dwarf. This will involve clearly a great amount of experimentation, in particular in view of the fact that it may be difficult to distinguish the homozygous dwarf plants from the heterozygous semi-dwarf ones, due to the influence of both the genetic background and the

environment on the expression of this character, as indicated by Barret et al (page 828, 2"d column 1st paragraph).

Further, even if one succeeds at identifying plants having a semi-dominant mutation, he will still not be able to determine whether or not there is among them a plant with the *bzh* mutation, since he will have no means to detect this particular mutation and thus to differentiate it from other mutants having a similar phenotype. Thus, he will not be in possession of the bzh mutant plant reported by Foisset et al.

As discussed above, EMS mutagenesis is non-discriminatory. EMS mutagenesis primarily induces G→A substitutions. Therefore, the only suggestion that the skilled artisan would take from Foisset et al is that the *bzh* mutation is likely a G→A substitution. However, the size of the rapeseed genome is about 1200 x 10^6 bp. If one considers a G/C content of approximately 50%, there would be about 600 x 10^6 possible G→A substitutions genome-wide. Again, the disclosure of Foisset et al would not place the skilled artisan in of the specific *bzh* mutant plant of the present invention, much less provide information on the gene involved in the *bzh* mutation or the position of the mutation within this gene. Put simply, the skilled artisan would have no means to determine whether or not one of the plants selected after EMS mutagenesis has the same *bzh* mutation as in the presently claimed invention.

Second, with respect to the Examiner's allegations of enablement through alleged availability on pages 8-9 of the Office Action (restated above), Applicants **submit herewith** a Declaration under 37 C.F.R. §1.132 executed by Michel Renard and Pierre Barret who are inventors of the present application and authors of Foisset et al. In paragraph 6 of the Declaration, Michel Renard and Pierre Barret take issue with the Examiner's allegation and state:

> 6. Contrary to the Examiner's assertions indicated in paragraph 5 above, no biological material containing the bzh gene was made available to the public or would have been provided to the public upon request prior to the filing date of the above-identified application.

In view of the non-availability of the biological material disclosed in Foisset et al and the lack of an enabling disclosure provided by Foisset et al of providing an isolated nucleic acid sequence encoding the polypeptide of SEQ ID NO: 4 (Claim 1), Applicants submit that Foisset et al fails to anticipate and/or render obvious the invention of Claim 1 or the claims dependent therefrom. Further, Barret et al fail to compensate for this deficiency in the disclosure of Foisset et al for the reasons stated above.

Accordingly, withdrawal of this ground of rejection is requested.

Finally, the Examiner's objection to Claim 16 is traversed. The Examiner objects to Claim 16 as including a "(" at the beginning of the sentence. However, the Examiner is referring to Claim 16 as it appears in the claims appendix attached to the Appeal Brief filed March 7, 2008. This is not a set of claims that were presented for entry and/or modification of the pending claims, but instead are a representation of the claims that are of record at the time the Appeal was filed. The fact that these claims may contain a minor typographical error of a formatting nature is irrelevant to the claims at issue. Thus, this objection is without merit. Nonetheless, Claim 16 as presented herein does not have the referenced "(" and the removal need not be marked as the claims presented herein are amended relative to the last entered claims amendments filed on July 12, 2007.

Withdrawal of this ground of objection is requested.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

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